



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/462,961

04/10/2000

JOHANNES KNOBLICH

GK-ZEI-3075

5712

26418

7590

03/21/2003

REED SMITH, LLP  
ATTN: PATENT RECORDS DEPARTMENT  
599 LEXINGTON AVENUE, 29TH FLOOR  
NEW YORK, NY 10022-7650

EXAMINER

ROBINSON, MARK A

ART UNIT

PAPER NUMBER

2872

DATE MAILED: 03/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/462,961

Applicant(s)

KNOBLICH, JOHANNES

Examiner

Mark A. Robinson

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 January 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 21-26 and 28-46 is/are pending in the application.
- 4a) Of the above claim(s) 21-24, 33-35 and 37-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25, 26, 28-32, 36 and 40-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other:

DETAILED ACTION

*Claim Rejections - 35 USC § 112*

1. Claims 25,26,28-32,36 and 40-46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 40,45 and 46 state that "no direct reflection of illumination light" or "substantially no direct reflection of illumination light" is incident into the illumination channels. However, the amount of reflected light which falls into the observation channels varies depending upon the reflective properties of the sample being illuminated (this fact was alluded to on page 5 of applicant's remarks), and the sample itself is not presumed to be part of the claimed combination. Accordingly, the metes and bounds of the claims are unclear.

Further, applicant has presented new claim 46 in order to cover instances where fluorescence is not produced in the sample. Claim 46 also states that "substantially no direct reflection of illumination light falls into the observation channels." However, on page 4 of the response, applicant states that the device of claim 40 operates only by light fluorescing from the sample into the observation channels, i.e. not by

Art Unit: 2872

directly reflected light. If this were not the case, it would appear that the newly added feature would be a misdescription of the invention since figs. 4-6 appear to show light being "directly" reflected back up into the observation channel. Claims 40 and 46 include virtually the same structural limitations. Accordingly, it is unclear how the structural features of claim 46 can produce an observed image since it does not function via fluorescence. In other words, if both of these claims include the same structural features, it is unclear how both claims can define an operable device if they function via different principles, i.e. fluorescence and non-fluorescence. If the device of claim 40 requires fluorescence for viewing, it seems that the device of claim 46 would also require fluorescence in order to be operable since neither device functions via direct reflection.

Inasmuch as the claims are able to be understood in light of the 112 rejections made above, the following rejection(s) apply:

***Claim Rejections - 35 USC § 103***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Art Unit: 2872

3. Claims 40,25,26,28,29,36,41 and 43-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siersch made of record.

The limitations of these claims are either met by or obvious over Siersch as discussed in the previous office action. Regarding claims 40,45 and 46, Siersch shows in fig. 3 that no direct reflection or substantially no direct reflection of light reaches the observation channels. Using the law of reflection, light incident from an illumination channel at the angle shown would be directly reflected at an equal angle back toward the opposite illumination channel, thus satisfying the limitation that "no direct reflection of illumination light falls into the observation channels."

4. Claims 30-32 rejected under 35 U.S.C. 103(a) as being unpatentable over Siersch in view of Takagi et al, both made of record.

These claims stand rejected as discussed in the previous office action.

5. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Siersch in view of Takagi et al and Greenberg, all made of record.

Art Unit: 2872

This claim stands rejected as discussed in the previous office action.

***Response to Arguments***

6. Applicant's arguments filed 1/8/03 have been fully considered but they are not persuasive.

Applicant has argued that Siersch does not meet the limitations concerning direct reflection found in amended claim 40 and new claims 45 and 46, and that the illumination and observation channels of Siersch are not in perpendicular planes.

However, in light of the 112 rejection above, it is seen that Siersch meets the structural requirements of the claims in question. Siersch shows at least one angled illumination channel(14,21) which is located in a plane perpendicular to a plane containing observation channels(13). Note the vertical and horizontal lines shown in the cross sectional drawing of fig. 3 taken along line A-B. These lines show two vertical planes (relative to the main drawing of fig. 3) which are perpendicular to one another that contain the illumination and observation channels, thus satisfying this limitation of the claims.

Further, as noted above, Siersch meets the limitations concerning "no direct reflection..." as they are presently set

Art Unit: 2872

forth in the claims, since light from an illumination channel would be directly reflected back toward the other illumination channel, thus avoiding incidence upon the observation channels.

### *Conclusion*

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2872

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Robinson whose telephone number is (703) 305-3506.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cassandra Spyrou can be reached at (703) 308-1687. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

MR

3/19/03

  
MARK A. ROBINSON  
PRIMARY EXAMINER